REMARKS

Claims 9, 11, 19 and 20 are all the claims pending in the application.

Rejection under 35 U.S.C. § 112, first paragraph

At page 2 of the Office Action, the Examiner rejected claims 9, 11, 19, and 20 on the basis that written description is lacking for a router, a virtual circuit, and a bus interface unit.

Applicant respectfully traverses and points the Examiner to the following:

Referring to claim 9, the specification identifies in full, clear, concise, and exact terms that the subscriber unit comprises a router. Claim 9 recites "an Internet router, wherein the matrix can be controlled so that calls to an Internet service provider pass through the Internet router." Referring to US Patent Application Publication 20040081188 A1, which corresponds to the present application, [0024] indicates that the subscriber unit "further includes an Internet router and…means for controlling the matrix so that calls to an Internet service provider pass through the router." Applicant discloses a similar router at [0025] as well.

The Examiner identifies an "optional router" in the specification and posits that it is not reasonable to make such a router mandatory in the claims. Applicant notes that the optional nature of router RT at [0085] relates to the presence of "Internet routing functions which are normally provided by a router on the premises of the Internet service provider." Likewise, the optional nature of router RT" at [0090] relates to the presence of "data network termination and

Internet routing functions that are normally executed by a router on the premises of the Internet service provider." That is, the particular routers represented by RT and RT" are optional if another router or router function is otherwise supplied. Such a description of RT and RT" does not negative the sufficiency of written description elsewhere in the specification.

Referring to claim 11, the specification identifies in full, clear, concise, and exact terms that the subscriber unit comprises a virtual circuit that corresponding to the Internet service provider. Claim 11 recites such a virtual circuit. At [0016], Applicant indicates that one of the aspects of the claimed subscriber unit is "to concentrate Internet frames and transmit them in a virtual circuit routing them to a data switching center." The specification details further support at [0068] - [0077] and [0099]. Particularly, "[c]all processor CP allocates a virtual circuit to each call to an Internet service provider. Thus each Internet frame is transmitted in a virtual circuit corresponding to an Internet service provider" ([0068]). No new matter was introduced by the previous amendment.

Referring to claims 19 and 20, the specification identifies in full, clear, concise, and exact terms that the subscriber unit comprises a first synchronous bus coupled to a first bus of the digital subscriber card, a second synchronous bus coupled to a second bus of the digital subscriber card, and a bus interface circuit.

The Examiner appears to consider that claims 19 and 20 both comprise a "bus interface unit to be connected to the 4 buses." Applicant draws attention to the fact that claims 19 and 20

recite a "bus interface circuit coupled to the first and second synchronous buses…wherein the first synchronous bus is coupled to the first bus of the digital subscriber card, and the second synchronous bus coupled to the second bus of the digital subscriber card" (emphasis added). Claims 19 and 20 do not necessarily comprise the four buses connected to a single unit.

Synchronous buses are disclosed at [0049], where B3 and B4 are identified as "synchronous passive buses." The specification continues at [0051]-[0060] describing Figure 2, which shows that synchronous bus B3 and synchronous bus B4 are coupled to bus B1 and bus B2, which are coupled to subscriber cards ISC1 and ISC8. {{please confirm that this is indeed an accurate representation of the buses and synchronous buses claims or provide further comments}}

Applicant also draws attention to the fact that claims 19 and 20 recite a subscriber unit comprising a bus interface circuit--not a bus interface unit--which is supported by the specification at [0040], [0043], and [0049]. No new matter was introduced by the previous amendment.

Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 112, first paragraph.

Objection to the Drawings under 37 C.F.R. § 1.83(a)

At page 3 of the Office Action, the Examiner objected to the drawings for not showing every feature of the invention specified in the claims.

Referring to claims 9, 11, 19, and 20, Applicant draws attention to the recitation of a virtual circuit. By virtue of its definition as a "virtual," the claimed virtual circuit is not a singular, dedicated circuit; this virtuality is illustrated in the Figures. Such a virtual circuit routes Internet frames to a data switching center ([0014]-[0016]), and are allocated by a call processor ([0068]). A virtual circuit may even be temporary ([0072]) or semi-permanent ([0073]). Applicant posits that the existing Figures adequately represent the claimed features. Of course, Applicant welcomes any suggestions the Examiner has to improve the drawings.

Referring to claims 19 and 20, Applicant draws attention to the recitation of various buses. As described above, synchronous buses B3 and B4 are illustrated in Figures 1, 2, and 3. Buses B1 and B2 are likewise illustrated in Figures 1, 2, and 3.

Referring to claim 19, Applicant draws attention to the recitation of a first means or controller and a second means or processor. Such a first means or controller may include, for example, a subscriber card ([0017]), a subscriber unit ([0019]), a connection matrix ([0042]), HDLC channels ([0062]), or a concentrator ([0078]). Such a second means or controller may

include, for example, a HDLC controller ([0055]-[0062]) or software in a digital subscriber connection card ([0017]). These examples are clearly represented in the drawings.

Applicant respectfully requests withdrawal of the objections under 37 C.F.R. § 1.83(a).

Claim Objections

At page 3 of the Office Action, the Examiner objected to the usage of "n" in claims 19 and 20. Applicant respectfully submits that the phrase "n x 64 kbit/s" simply describes the type of data links within the scope of the present claims. Such a description was allowed, for example, in the claims of U.S. Patent 6,674,747.

Applicant respectfully requests withdrawal of the objections to the claims.

Provisional Rejection on the Ground of Nonstatutory Obviousness-type Double Patenting

Various claims have been provisionally rejected over various claims of the following copending application: 10/669,647.

In view of the submission herewith of one or more timely filed terminal disclaimers in compliance with 37 C.F.R. § 1.321(c) or 1.321(d), Applicant respectfully requests the Examiner to withdraw the above-identified actual and/or provisional rejections.

Rejection of under 35 U.S.C. § 102

At page 5 and 6 of the Office Action, claims 9 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Dunn (U.S. Patent No. 6,072,793).

The Examiner relies on Dunn as teaching that i) network 7 has an inherent switch matrix, ii) the local area network 25 has an inherent router that connects it to internet service provider ISP1, and iii) the connection to ISP1 is a virtual circuit.

A rejection under 35 U.S.C. § 102 requires that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP § 2131.

Dunn does not teach a virtual circuit as presently claimed. The connection to ISP1 as disclosed by Dunn is not "virtual" nor does it "correspond to the Internet service provider." Rather, the invention of Dunn is directed to a main distributing frame that bypasses a local switch (see Fig. 2).

Further, the Examiner has an obligation to provide rationale or evidence tending to show inherency. See MPEP § 2112.IV: "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art" (quoting *Ex parte Levy*, 17 USPQ2d 1461, 1464, BPAI 1990; emphasis original).

In particular, with regard to claim 9, the Examiner fails to provide basis in fact or technical reasoning to reasonably support that Dunn teaches an inherent Internet router wherein the matrix can be controlled so that calls to an Internet service provider pass through the Internet router. With regard to claim 11, the Examiner also fails to provide support that Dunn teaches inherent analog subscriber channels.

Applicant respectfully requests withdrawal of the rejections under 35 U.S.C. § 102.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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